Distr.
LIMITED

ID/WG.471/5(SPEC.)
26 January 1988

ENGLISH

United Nations Industrial Development Organization

Expert Group Meeting for the Latin American and Caribbean Region, in Preparation for the First Consultation on the Sugar-cane Processing Industry

Vienna, Austria, 8-10 December 1987

REPORT*

* This document has been reproduced without formal editing.

V.88-20757

CONTENTS

	Paragraphs	Page
Preface		iii
The System of Consultations		iii
Consultation on the Food-processing Industry with Emphasis on Sugar-cane Processing		iv
Recommendations	1 - 3	1
Issue I: Diversification of the cane-sugar industry	4 - 8	1
Issue II: Improvement of the productivity in the sector	9 - 11	2
Chapter		
I. Organization of the meeting	12	2
Opening of the meeting	13 - 18	2
II. Summary of discussions	19 - 35	3
III. Closure of the meeting	36	6
Annexes		
I. List of Participants		7
II. Agenda		9
III. List of Documents		10

PREFACE

The System of Consultations

The Second General Conference of the United Nations Industrial Development Organization (UNIDO), held at Lima (Peru) in March 1975, recommended that UNIDO should include in its activities a system of continuing consultations between developed and developing countries with the aim of increasing the participation of the latter in world industrial production by means of enhanced international co-operation. Subsequently, the United Nations General Assembly, at its seventh special session in September 1975, supported this recommendation.

In May 1980 the Industrial Development Board decided to establish the System of Consultations on a permanent basis, and in May 1982 approved the rules thereof (The System of Consultations, PI/84), stipulating its principles, objectives and characteristics - in particular:

> "The System of Consultations shall be an instrument through which the United Nations Industrial Development Organization (UNIDO) is to serve as a forum for developed and developing countries in their contacts and consultations directed towards the industrialization of developing countries.
>
> The System of Consultations shall seek action-oriented measures towards increasing the share of developing countries in world industrial production and creating new industrial facilities in developing countries contributing to the establishment of a New International Economic Order. To that end, the problems associated with the industrialization of developing countries shall be considered on a continuing basis from a policy, economic, financial, social and technical point of view.
>
> The System of Consultations shall relate to co-operation between developed and developing countries and among developing countries themselves.
>
> The System of Consultations would also permit negotiations among interested parties at their request, at the same time as or after consultations.
>
> Participants of each member country should include representatives of governments, industry, labour, consumer groups and others, as deemed appropriate by each Government.
>
> Each Consultation Meeting shall formulate a report, which shall include conclusions and recommendations agreed upon by consensus and also other significant views expressed during the discussions."

Consultation on the Food-processing Industry with Emphasis on Sugar-cane Processing

At its second session in October 1986, the Industrial Development Board decided to include the Inter-regional Consultation on the Food-processing Industry with Emphasis on Sugar-cane Processing in the programme of consultation meetings for the biennium 1988-89.

In accordance with this decision and the programme of work adopted, the Inter-regional Consultation on the Food-processing Industry with Emphasis on Sugar-cane Processing will be held in Vienna, 26-30 September 1988.

Preparatory activities have begun at the regional level, including:

- Preparation of documents on the sugar-cane processing industry in the Latin American and Caribbean Region and Asia;

- Regional Expert Group Meetings for Latin America, the Caribbean, Asia and the Pacific.

The Expert Group Meeting for Latin America and the Caribbean was organized by UNIDO in close collaboration with the Secretariat of the Group of Latin American and Caribbean Sugar Exporting Countries (GEPLACEA) and the International Trade Centre (UNCTAD/GATT). The meeting was held at Vienna, Austria, from 8-10 December 1987.

The objectives of the meeting were:

(a) To discuss the present situation of the sugar-cane processing industry with special emphasis on diversification of the industry and the potential for expansion of by-products development that can be used for various purposes;

(b) To discuss the potentials for, and perspectives of applying new cost- and energy-saving technologies aiming at reducing production costs;

(c) To identify common and specific constraints which hamper the development of this industry in the developing countries of the region;

(d) To examine and propose ways and means for international co-operation and actions needed to overcome identified constraints;

(e) To select specific issues for further elaboration to be discussed at the First Consultation.

RECOMMENDATIONS

1. The Expert Group Meeting for the Latin American and Caribbean Region, in preparation of the First Consultation on the Sugar-cane Processing Industry, fully recognized the importance of the economic and technical problems facing the sugar industry in the world.

2. As a result of the discussions, the participants recommended that:

- There should be an improved and strengthened exchange of information on the situation of, and the prospects for the cane-sugar industry;
- Co-operation be developed in the region to overcome identified constraints within the sector;
- In order to find new alternatives and solutions to improve efficiency and productivity in the region, new technologies available to the sugar industry should be introduced;
- Special attention should be given to the diversification of the cane-sugar industry and the production of by-products;

3. It was recommended that the issues to be examined at the First Consultation on the Sugar-cane Processing Industry should be as follows:

Issue I: Diversification of the cane-sugar industry

4. Diversification of the industry in all aspects including the need to develop national policies and strategies for the production and utilization of various by-products and derivatives based on bagasse and molasses. Attention should be given to improving existing ways for the utilization of sugar products such as health foods, direct utilization of liquid sugar, etc.

5. Special attention should be given to the identification of potential markets for specific products and marketing assistance for the sale of the products.

6. The constraints to development should be examined giving attention to the limited financial resources, possible sources and ways of financing the diversification and restructuring of the industry.

7. Among the constraints, the problems related to management should be mentioned. Similarly, any socio-economic problems which might be created by restructuring and diversification should be taken into account.

8. The major aims of the diversification of the sugar-cane industry are to contribute to the development programmes of the countries, to mobilize human resources for development of the sector and establish ways and means of international co-operation on a South-South and North-South basis. It should also strengthen the general economic performance of the sugar-producing countries and decrease their dependence on the international sugar market.

Issue II: Improvement of the productivity in the sector

9. Improving existing and introducing new technologies in the sugar-cane industry, with the aim of:

- reducing production costs;
- rational energy utilization;
- improving quality of products and easing access to the markets;
- infrastructural improvement as a contribution to the increased efficiency of the industry.

10. It was agreed that UNIDO and GEPLACEA should work closely together during the preparatory period using the existing knowledge and experience collected by these Organizations. Close co-operation will be maintained with other international organizations such as FAO, ITC, and the International Sugar Organization.

11. It is necessary to ensure adequate time for informal discussions among participants during the Consultation meeting.

I. ORGANIZATION OF THE MEETING

12. The Expert Group Meeting for the Latin American and Caribbean Region in preparation of the Inter-regional Consultation on the Food-processing Industry with Emphasis on Sugar-cane Processing was held at Vienna, Austria, from 8-10 December 1987. The meeting was attended by 14 participants from 13 countries, and representatives of the GEPLACEA and the International Trade Centre (UNCTAD/GATT) Secretariats. (See Annex I for list of participants).

Opening of the meeting

13. At the opening session, the meeting was addressed on behalf of Mr. G.R. Latortue, Director, System of Consultations Division, by a UNIDO representative who welcomed the participants and highlighted the importance of the sugar-cane industry to the region as well as the acute economic situation prevailing in the sector.

14. The world sugar economy was presently characterized by a combination of complex problems predominantly affecting developing but also developed countries. The existence of the recurring supply/demand imbalance reflected by fluctuating and unpredictable market prices which had caused unfavourable consequences for the GNP growth and commodity exports in many countries, especially those which depend on sugar as the dominant export product and the principal source of hard currency earnings.

15. The UNIDO representative referred to the competition among exporters as a factor contributing to the undesirable trends in the world sugar economy as well as the introduction of alternative sweeteners. He emphasized that sugar substitutes and the declining consumption of the product had led to the narrowing of the market.

16. Considering the importance of sugar for the countries of South America and the Caribbean, the present "commodity crisis" might have serious consequences for their economies, and could lead to the closure of the sugar mills, as well as to declining employment and revenues. It could also trigger off the "multiplier chain" and influence other branches of the industry and agro-sectors. Added to these structural changes were the high stock volumes and prices which were below the stimulative production costs.

17. In view of the current economic situation of the sugar-cane industry, the search for alternative or supplementary activities within the industry was a reality which called for minimizing the economic problems caused by the sugar over-supply on the world market. In this connection, the development of by-products and the diversification of the industry would make it possible to present new opportunities for the whole economy of the region.

18. He emphasized the need for greater efforts to co-ordinate the activities of the sugar-producing countries in search of efficient utilization methods of existing, and the introduction of new technologies in the sector and to alternative ways of their development in the future, and expressed his confidence that the meeting would determine those areas which were crucial for the future development of the sugar-cane industry in Latin America and the Caribbean.

II. SUMMARY OF DISCUSSIONS

19. Mr. Fernando Cordovez (Venezuela), Technical Director, El Palmar Sugar Mill was elected Chairman of the meeting. Introducing the agenda, he indicated that in order to fulfil the objectives of the meeting, attention should be first given to reviewing and characterizing the problems of the sugar-cane industry in Latin America and the Caribbean before determining the priority areas and issues for consideration of the Inter-regional Consultation on the Food-processing Industry with Emphasis on Sugar-cane Processing. The agenda was adopted and is attached as Annex II.

20. The UNIDO representative of the System of Consultations Division explained the scope of the meeting, indicating that its purpose was to review the background and information papers, to express the views of participants on the subject and to develop possible issues for the forthcoming Consultation.

21. In accordance with the agenda, the Chairman requested the participants to present the documents prepared on behalf of their organizations for the meeting and to follow up with the characterization of the problems affecting the region's sugar-cane industry. Appreciation was expressed to those participants who also submitted reports relating to their own countries. Each of the experts, in turn, summarized the situation of the sugar-cane industry in his/her country with regard to production, consumption, exports, price trends, development and utilization of by-products and diversification of the industry.

22. The participants recognized that in view of the current situation of the sugar-cane industry, the search for alternative or supplementary activities within the industry was a necessity if the problems caused by the critical situation were to be overcome. It was agreed that one of the ways to deal with this problem was by diversification of the sugar industry.

23. The participants highlighted the various aspects of the use of by-products and production of derivatives of sugar-cane in Latin America and the Caribbean. It was noted that some of the efforts had been on the verge of achieving their objectives; some of them failed and resulted in losses of investments. Nevertheless, it became obvious from the statements that a number of countries of the region continued to initiate and carry out programmes of this kind with short-, medium- and long-term goals. The representative of GEPLACEA stressed the importance of the activities in this field and informed the meeting that diversification was considered as a high priority area among the member countries.

24. It was also agreed that diversification and industrialization presented vast opportunities for the whole economy of the region and should not focus solely on the elimination of existing extra stocks and support of the world prices by cutting down export supplies.

25. The development of by-products would, in particular, make it possible to diversify the economies of the sugar-exporting countries of the region and eliminate their dependence on a single product. The participants agreed that the use of by-products might contribute to solving the problems of renewable raw materials, sources of energy, and food supply.

26. It was recognized that there were a number of technologies already available and that some new ones would be available to the sugar industry shortly; in this connection, a serious market analysis should be carried out and the economy of production of derivatives should be taken into account. Until now the introduction of by-products to the market had been blocked by the phenomena of a higher competitiveness of original products.

27. It was agreed that at present the fuel alcohol programmes which have proved most successful were among the priority areas in the economies of the region. In spite of their controversial character and from the purely economic point of view, they are now closely linked to a country's particular needs and are considered to have a multifunctional purpose in its economic stability. Advantages can be derived from reduction of the equitable sugar surpluses by, inter alia, expanding the internal market for alcohol, switching sugar exports for alcohol exports, and distribution of sugar production costs by producing derivatives which will help to overcome the effect of low prices. The participants noted that from the point of view of the evaluation of the forthcoming Consultation, special emphasis should be placed on the analysis of the most economical application of sugar-cane by-products, that of the production of ethanol and fuel alcohol.

28. The participants highlighted the greater multiplier effect of the sugar-cane by-products projects in general, especially in the countries with mono-oriented economies based on sugar. In this regard, the following aspects were considered: energy security, regional development, employment, strengthening of the capital goods industry, speeding up the rates of growth of GNP, environmental protection measures, etc.

29. Following the characterization of the problem of diversification of the sugar-cane industry in Latin America and the Caribbean, the participants focused their attention on the other aspects of the development of the sector. They agreed that special emphasis should be placed on the analysis of the potentials of the international market and trade. If the product could be produced to meet quality standards and marketed at a competitive price, the Latin American countries would be in a good position to transfer a tangible portion of the existing commodity stocks of sugar into processing and export of by-products.

30. It was also noted that any success in expanding the international trade of by-products depended on the production costs, and therefore, the general performance and productivity of the sector. The representatives of GEPLACEA expressed their opinion that the out-dated technology and lack of investment capital for restructuring and renovating existing mills and by-product processing lines, hindered the development of the industry and in some cases prevented it competing effectively on the international market. It was agreed that new regulations and measures should be adopted at the national and regional level to stimulate the flow of capital for the rehabilitation of the sector. Changes in depreciation rates, employment regulations and general improvement of management should also be considered as ways and means to solve existing problems of the technological under-development of the industry.

31. The participants recognized the growing complexity of the international sugar market as one of the obstacles to rapid growth of the industry. The growing over-supply of the product, the rise of protectionism, the lack of efficient tools and mechanisms to regulate the market, hindered any efforts of the sugar-exporting countries to reach a mutually acceptable compromise in trade issues. The participants agreed that it was necessary to use any international forum or organization, especially the International Sugar Organization and GATT to stabilize the sugar prices at fair levels.

32. Some of the participants drew the attention of the meeting to the phenomena of the rapid restructuring of the international sugar market. They pointed out the importance of the growing demand for and supply of "white sugar". It was agreed that any increase in the processing activities and of value-added in the sugar industry would undoubtedly lead to the strengthening of the position of the sugar-exporting countries.

33. Many examples and new approaches to deal with the problems of the sugar industry were highlighted during the meeting. The production of "alternative crops", "non-traditional" products, energy generation, co-operative movements, comprised the broad spectre of national approaches to deal with the over-supply, production, and marketing of sugar. The participants unanimously agreed that further research and exchange of opinions were needed in order to mobilize the potentials of the sugar-exporting countries to solve the problem.

34. Continuing with the agenda, the Chairman invited the participants to submit their reports relating to their countries. There was a lively exchange of views which enhanced the value of the discussions.

35. At the end of the meeting the UNIDO representative submitted the proposal for conclusions and recommendations, which were adopted by consensus for further elaboration and presentation at the First Consultation.

III. CLOSURE OF THE MEETING

36. At the closing session, the Chairman thanked the experts for their excellent professional contributions, their efforts and enthusiastic and fruitful participation. He expressed his strong belief that the outcome and recommendations of the meeting would be extremely useful for the preparation of the Inter-regional Consultation on the Food-processing Industry with Emphasis on Sugar-cane Processing and contribute to fulfilling its objectives.

Annex I

LIST OF PARTICIPANTS

Argentina

Victor Hemsy, Asesor Tècnico, H. Directorio, Estaciòn Experimental Agro-Industrial "O. Colombres" (EEAOC), Casilla de Correo 71 4000, S.M. de Tucuman

Austria

Irmfried Irmler, Sugana Zucker Ges.m.b.H., Am Heumarkt 13, A-1030 Vienna

Ewald Seidelmann, Tullner Zuckerfabrik AG, Hollandstrasse 2, A-1020 Vienna

Barbados

David Harold West, Director, Sugar Technology Research Unit, Barbados Sugar Industry Ltd., Edgehill, St. Thomas

Dominican Republic

Altagracia Rivera de Castillo, Asesora, INAZUCAR, P.O. Box 223-2, Santo Domingo

France

Patrick du Genestoux, Managing Director, Sociètè "Etudes et recherches sucriéres" (ERSUC), 131 avenue des Champs Elysèes, 75008 Paris

Guatemala

Armando Boesche, Gerente General, Asociaciòn de Azucareros de Guatemala (ASAGUA), Edificio Tivoli, 7º piso, 6a Calle no. 6-38, Guatemala

Haiti

Carnot Duval, Membre du Comitè chargè de la planification du sucre, Haitian American Sugar Company (HASCO), Boîte postale 1310, Port-au-Prince

Jamaica

Ian Sangster, Director of Factory Technology Division, Sugar Industry Research Institute, P.O. Box 87, Kingston 7

Mexico

Rudy Omar Albertos Càmara, Subdirector de Planeaciòn y Desarrollo de Azùcar S.A., Av. Insurgentes Sur 1079 - 4º piso, Mexico D.F. 03120

Panama

Ernesto Koref, Ambassador Extraordinary and Plenipotentiary, Permanent Representative of Panama to UNIDO, Strohgasse 35/I, A-1030 Vienna

Peru

Cesar Gonzalez Vasquez, Asesor Ministro Agricultura, Presidente de la Comisiòn Interministerial Azûcar, Ministerio de Agricultura, Oficina 614, Lima

Poland

Janusz Hazczynski, Technical Expert, POLIMEX-CEKOP Ltd., ul. Czackiego 7/9, 00-950 Warsaw

Venezuela

Fernando Cordovez, Technical Director of El Palmar Sugar Mill, Central El Palmar, San Mateo, Estado de Aragua

Organizations of the United Nations system

International Trade Centre (UNCTAD/GATT)

Jeremy Wells, Senior Marketing Adviser, Market Development Section, Division of Product and Market Development, Palais des Nations, 1211 Geneva 10, Switzerland

Intergovernmental organizations

Group of Latin American and Caribbean Sugar Exporting Countries (GEPLACEA)
(Grupo de Paises Latinoamericanos y del Caribe Exportadores de Azûcar)

Josè Antonio Cerro, Executive Secretary, Av. Ejèrcito Nacional 373, ler Piso, 11520 Mexico DF, Mexico

Eduardo Latorre, Adviser, Ave. Ejèrcito Nacional 373, ler Piso, 11520 Mexico DF, Mexico

Antonio Celso Sturion, Assistant Secretary on Technology, Av. Ejèrcito Nacional 373, ler Piso, 11520 Mexico DF, Mexico

Annex II

AGENDA

1. Opening of the meeting

2. Election of chairman

3. Adoption of the agenda and organization of work

4. Situation of the sugar-cane industry in Latin America and the Caribbean

5. Selection of main issues to be presented at the Inter-regional Consultation

6. Consideration and adoption of the report of the meeting.

Annex III

LIST OF DOCUMENTS

Provisional agenda	----
The diversification of the cane sugar industry in Latin America and the Caribbean prepared by GEPLACEA	ID/WG.471/1 (SPEC)
The diversification of cane sugar prepared by the Cuban Research Institute for Sugar-Cane Derivatives (ICIDCA)	ID/WG.471/2 (SPEC)
Some aspects of UNIDO's technical assistance activities in the sugar industry prepared by UNIDO	ID/WG.471/3 (SPEC)
The sugar-cane industry and sugar-cane by-products in Latin America prepared by UNIDO	ID/WG.471/4 (SPEC)
La Agroindustria de la Cana de Azucar en la Republica Dominicana: Antecedentes, Situacion, Actual y Posibilidades Futuras prepared by Altagracia Rivera de Castillo	----
Contributions on economic and market aspects prepared by Patrick du Genestoux (France)	----
Proceso Industrial de la Cana de Azucar en Guatemala prepared by Armando Boesche	----
First results on the operation of a small-scale sugar factory based on cane separation prepared by Helmut C.C. Bourzutschky and Winston O. Ricket and submitted by Ian Sangster (Jamaica)	----
Cane separator technology - a way to diversify from conventional sugar making by Helmut C.C. Bourzutschky and submitted by Ian Sangster (Jamaica)	----
Desarrollo y Diversificacion de la Industria Azucarera Mexicana prepared by Rudy O. Albertos Cámara	----
The diversification of the cane sugar industry in Latin America and the Caribbean - export development potential prepared by the International Trade Centre (UNCTAD/GATT)	----
Development of the Latin American and Caribbean sugar industry: predictions for the Year 2000 prepared by GEPLACEA	----

La Agroindustria Azucarera de America Latina: Situacion Actual y Perspectivas prepared by GEPLACEA	----
Tecnologia Azucarera: Desarrollo Actual y Perspectivas submitted by GEPLACEA	----
Cogercao de Energia Elètrica nas Usinas e Estilarias Estudo de Viabilidade Tècnico-Economica submitted by GEPLACEA	----